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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant : Markus SPEIDEL et al.

Group Art Unit : Unknown

Serial No : 09/880,068

Examiner : Unknown

Filed : June 14, 2001

For : NICKEL-BASED ALLOY FOR HIGH-TEMPERATURE TECHNOLOGY

**PRELIMINARY AMENDMENT**

Commissioner of Patents and Trademarks
Washington, DC 20231

Sir :

Prior to examination of the above-identified patent application on the merits, entry of the following amendment is respectfully requested.

IN THE SPECIFICATION

In accordance with 37 C.F.R. 1.125, Applicants are submitting herewith a Substitute Specification accompanied by a marked-up copy of the Substitute Specification. Applicants note that paragraph numbering has been added to the Substitute Specification.

Applicants respectfully submit that the Substitute Specification includes no new matter.

In view of the above, entry of the Substitute Specification is respectfully requested.

IN THE ABSTRACT

Please cancel the Abstract, and replace it with the Abstract attached to this amendment.

IN THE CLAIMS

Please cancel claims 1-7 without prejudice or disclaimer of the subject matter recited therein.

Please enter claims 8-32 prior to cancellation of claims 1-7, as follows:

---8. Creep-proof and corrosion-resistant nickel-based alloy for the use in high-temperature technology comprising, in wt-%:

0.0015 to 0.60 carbon (C);

0.20 to 0.90 nitrogen (N);

22.0 to 32.0 chromium (Cr);

5.0 to 20.0 elements of the groups 4, 5, and 6 of the periodic table, except Cr;

0.03 to 3.0 aluminum (Al);

0.4 to 3.0 silicon (Si);

maximum of 0.014 phosphorus (P);

maximum of 0.004 sulfur (S);

minimum of 51 of nickel (Ni) or a combination of nickel (Ni) and cobalt (Co); and

melting-related contaminants.

9. Nickel-based alloy according to claim 8, comprising, in wt-%, 0.16 to 0.5 C.

10. Nickel-based alloy according to claim 8, comprising a ratio of nitrogen to carbon of 0.5 to 5.5.

11. Nickel-based alloy according to claim 10, wherein the ratio of nitrogen to carbon is 1 to 4.

12. Nickel-based alloy according to claim 10, wherein the ratio of nitrogen to carbon is 1 to 3.

13. Nickel-based alloy according to claim 8, comprising a total concentration of molybdenum (Mo) and tungsten (W), in wt-%, according to the following formula:

$$Mo + W/2 = 3.0 \text{ to } 10.0.$$

14. Nickel-based alloy according to claim 13, comprising a total concentration of molybdenum (Mo) and tungsten (W), in wt-%, according to the following formula:

$$Mo + W/2 = 4.0 \text{ to } 8.0.$$

15. Nickel-based alloy according to claim 8, comprising, in wt-%, 25.0 to 30.0 Cr.

16. Nickel-based alloy according to claim 8, comprising, in wt-%, 0.5 to 1.0 Si.

17. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%.

18. Nickel-based alloy according to claim 17, comprising, in wt-%, 0.01 to 0.12 of at least one element of Group 3 of the periodic table, except actinoids.

19. Nickel based-alloy according to claim 8, comprising manganese (Mn), said Mn being present up to 0.60 wt-%.

20. Nickel based-alloy according to claim 8, comprising iron (Fe), said Fe being present up to 14.8 wt-%.

21. Nickel based-alloy according to claim 8, comprising boron (B), said B being present up to 0.01 wt-%.

22. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; comprising manganese (Mn), said Mn being present up to 0.60 wt-%; comprising iron (Fe), said Fe being present up to 14.8 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.

23. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; comprising manganese (Mn), said Mn being present up to 0.60 wt-%; and comprising iron (Fe), said Fe being present up to 14.8 wt-%.

24. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; comprising manganese (Mn), said Mn being present up to 0.60 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.

25. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; comprising iron (Fe), said Fe being present up to 14.8 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.

26. Nickel based-alloy according to claim 8, comprising manganese (Mn), said Mn being present up to 0.60 wt-%; comprising iron (Fe), said Fe being present up to 14.8 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.

27. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; and comprising manganese (Mn), said Mn being present up to 0.60 wt-%.

28. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; and comprising iron (Fe), said Fe being present up to 14.8 wt-%.

29. Nickel based-alloy according to claim 8, comprising at least one element of Group 3 of the periodic table, except actinoids, said at least one element being present up to 0.15 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.

30. Nickel based-alloy according to claim 8, comprising manganese (Mn), said Mn being present up to 0.60 wt-%; and comprising iron (Fe), said Fe being present up to 14.8 wt-%.

31. Nickel based-alloy according to claim 8, comprising manganese (Mn), said Mn being present up to 0.60 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.

32. Nickel based-alloy according to claim 8, comprising iron (Fe), said Fe being present up to 14.8 wt-%; and comprising boron (B), said B being present up to 0.01 wt-%.---

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## REMARKS

Entry of the amendment herein is requested prior to examination of the application.

The amendments herein are being presented to even more clearly disclose Applicants' invention by even more clearly defining that the nickel-based alloy comprises a minimum of 51 wt-% of nickel (Ni) or a combination of nickel (Ni) and cobalt (Co).

Moreover, the specification has been corrected to denote, when referring to the nickel-based alloy of DE-C-4411228, that is contains 0.10 to 3.0 silicon as compared to nitrogen. This change does not constitute new matter because it is merely including the subject matter disclosed in this document, as can be seen from a copy of the document submitted with the Information Disclosure Statement submitted on even date herewith.

Still further, it is noted that the claims have been amended by canceling original presented claims 1-7, and adding claims 8-32, to remove multiple dependent claims, and to place the claims more in accordance with idiomatic English and standard U.S. practice. For example the recitations in claim 1 relating to amounts of alloying components that can be present up to the recited amounts have been placed into dependent claims. Also, the amended claim have been placed into the Summary of the Invention section of the specification.

Applicants note that the amendments which have been made in this amendment should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed attached thereto.

If there should be any questions, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
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September 14, 2001
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